

LISTING OF CLAIMS:

1-77. Canceled.

Please add the following new claims 78-84

Claim 78. A method comprising the steps of
identifying a mammal suspected of suffering from cerebral ischemia which affects glia or other
non-cholinergic cells; and
administering (a) IGF-1 and/or (b) a biologically active analogue of IGF-1 to the CNS of the
mammal in an amount sufficient to reduce the loss of neurons and/or infarction associated with
cerebral ischemia without significantly altering the brain temperature of the mammal.

Claim 79. The method of claim 78, wherein the IGF-1 is administered via the cerebrospinal
fluid.

Claim 80. [Canceled]

Claim 81. The method of claim 78, wherein the mammal is a human.

Claim 82. The method of claim 79, wherein the IGF-1 is administered intrathecally.

Claim 83. The method of claim 79, wherein the IGF-1 is administered epidurally.

Claim 84. The method of claim 79, wherein the IGF-1 is administered
intracerebroventricularly.

Claim 85. The method of claim 78, wherein the IGF-1 is administered via the cerebral
vasculature.

Claim 86. The method of claim 78, wherein the IGF-1 is administered via the carotid artery.

Claim 87. The method of claim 78, wherein the cerebral ischemia is caused by asphyxia.

Claim 88. The method of claim 78, wherein the cerebral ischemia is caused by trauma.

Claim 89. The method of claim 78, wherein the cerebral ischemia is caused by hypoxia.

Claim 90. The method of claim 78, wherein the cerebral ischemia is caused by an embolism.

Claim 91. The method of claim 90, wherein the embolism is a thromboembolism.

Claim 92. The method of claim 78, wherein the cerebral ischemia is caused by a toxin.

Claim 93. A method for treating non-cholinergic cells damaged from CNS injury,
comprising administering to the CNS of a mammal in need thereof, an effective amount of IGF-
1, wherein the CNS injury is an injury to the hippocampus.

Claim 94. A method of treating non-cholinergic cells damaged from CNS injury, comprising administering to the CNS of a mammal in need thereof, an effective amount of a biological analog of IGF-1, wherein the CNS injury is an injury to the hippocampus and further wherein said analog is selected from the group consisting of naturally-occurring analogs, IGF-2, and des 1-3 IGF-1.

Claim 95. A method of treating glial cells damaged from CNS injury, wherein said CNS injury predominantly affects glia, comprising administering to the CNS of a mammal in need thereof, an effective amount of IGF-1, wherein the CNS injury is selected from the group consisting of periventricular leucomalacia, carbon monoxide inhalation, ammonia intoxication, and gaseous intoxication.

Claim 96. A method of treating glial cells damaged from CNS injury, wherein said CNS injury predominantly affects glia, comprising administering to the CNS of a mammal in need thereof, an effective amount of a biological analog of IGF-1 said analog is selected from the group consisting of naturally-occurring analogs, IGF-2, and des 1-3 IGF-1, and further wherein the CNS injury is selected from the group consisting of periventricular leucomalacia, carbon monoxide inhalation, ammonia intoxication, and gaseous intoxication.